

PATENT ABSTRACTS OF JAPAN

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(71) Applicant : TETRA LAVAL HOLDINGS & FINANCE SA

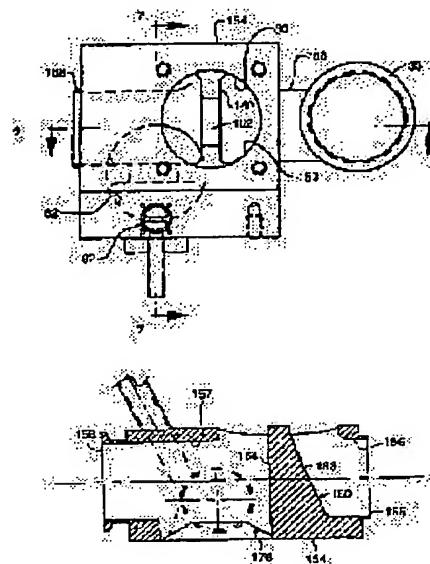
(22) Date of filing : 27.11.1997

(72) Inventor : BUESING JONATHAN P

(30) Priority

Priority number : 97 926312 Priority date : 05.09.1997 Priority country : US

(54) STERILE VALVE ASSEMBLY



(57) Abstract:

PROBLEM TO BE SOLVED: To prevent generation of a stagnant region having poor exhaust by providing with a non-stagnant surface for self discharging a second surface of a second dam, in a diaphragm valve main body having a surface for delimiting a first dam for separating a first opening from a second opening, and a second dam for separating a third opening from the second opening.

SOLUTION: A first opening 155 for delimiting an inlet passage 156 and a second opening 158 for delimiting an outlet passage 157 are arranged coaxially with a valve main body of a sterile valve assembly main body for feeding a fluid food to a package machine, and a diaphragm opening 159 is formed in a direction perpendicular to its axis. The inlet 156 and the outlet 158 are separated from each other by a dam 160 having a seat 162 opposed to the diaphragm opening 159. A third outlet for delimiting an outlet passage and a diaphragm opening 82 are arranged on the valve main body 154, and the second outlet 157 and the third outlet are separated from each other by a dam provided with the same seat. Respective diaphragm openings 159, 82 are opened/ closed by a diaphragm valve, and a flow passage is switched.

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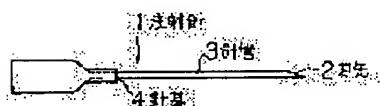
(11)Publication number : **07-051371**
 (43)Date of publication of application : **28.02.1995**

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A61L 33/00
B26F 3/00
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B29C 55/22
B29D 23/00
// B29L 23:00

(21)Application number : **05-203128** (71)Applicant : **DAIKYO SEIKO:KK**
 (22)Date of filing : **17.08.1993** (72)Inventor : **SUDOU MORIAKI**

(54) INJECTION NEEDLE AND ITS PRODUCTION METHOD**(57)Abstract:**

PURPOSE: To obtain an injection needle made of a synthetic resin material with hygienic, physical and chemical properties substitutable for a metallic needle and friendly to environment in disposal, by forming an injection needle using a synthetic resin composition with a specific value of Rockwell hardness (M method).



CONSTITUTION: This injection needle is formed from a synthetic resin composition with a Rockwell hardness (M method) of 65 or higher. Here, the synthetic resin shall have a modulus of bending elasticity of 20,000kg/cm² or higher. The synthetic resin composition shall contain one or more selected from a group consisting of polyethersulfone, polysulfone, polyamideimide, polyetherimide, polyimide, polycarbonate, polyester, polyamide, polypropylene, polyarylate, polymethylpentene, modified (polyphenylene oxide) and liquid crystal polyester. Thus, a thin and sharp needle substitutable for a stainless steel can be realized.

PATENT ABSTRACTS OF JAPAN

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A61M 5/32

(21) Application number : 06-078104

(71) Applicant : TERUMO CORP
TONEN CHEM CORP

(22) Date of filing : 23.03.1994

(72) Inventor : KASAI MASAAKI
YOSHIKAWA MAKOTO
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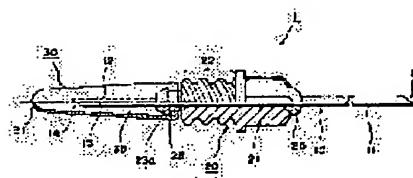
(30) Priority

Priority number : 05 62330 Priority date : 23.03.1993 Priority country : JP

(54) PLASTIC CANNULA AND ITS PRODUCTION

(57) Abstract:

PURPOSE: To provide the plastic cannula which has a high strength and high modulus of bending and good surface characteristics, permits easy piercing of a rubber plug, etc., of a blood collecting tube, does not damage biotissues at the time of piercing the cannula into these tissues, has excellent moldability and is suitable for extrusion molding.



CONSTITUTION: A blood collecting needle 1 has the plastic cannula 10, a hub fixed thereto and a cap 30 enclosing the rubber plug piercing part 12 of the cannula 10. The cannula 10 is composed of a synthetic resin mainly consisting of polyphenylene sulfide(PPS) and more particularly the high-molecular linear type PPS. Blade surfaces 13, 14 are respectively formed on the blade edges at both ends of the cannula 10.

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Detailed Description of the Invention:

[0009]

As materials to be used for this plastic cannula, polycarbonate (PC), polyester, acrylate, polyaramide, polyamide (PA), polyether ether ketone (PEEK), modified phenyleneoxide, polyetherimide (PEI), polymethylpentene and polysulfone are cited.